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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,240	09/28/2005	Pierre Lyot	P28446	4255
7055 7590 03/24/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER				
SASTRI, SATYA B				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
03/24/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com

pto@gbpatent.com

# Office Action Summary

**Application No.**

10/551,240

**Applicant(s)**

LYOT ET AL.

**Examiner**

SATYA B. SASTRI

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 1/9/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to application filed on September 28, 2005. Preliminary amendment filed on September 28, 2005 is made of record. Claims 9-28 are now pending in the application.

#### ***Claim Objection***

2. Claim 11 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 recites the same molar composition as in claim 9.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102 and 103***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-11, 13-21, 23-28 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brandt et al. (US 6,696,067 B2).

Brandt et al. disclose cosmetic compositions containing dispersion polymers for treating hair, skin or nails. Table I discloses suitable polymers and includes a dispersion polymer with 70 mole% acrylamide and 30 mole% DADMAC (col. 7).

The disclosed compositions are useful for treating skin, hair and nails with color conditioners explicitly disclosed (col. 17, 42-55, col. 18, 1-24, example 12).

Present claims recite compositions comprising at least one polymer obtained by inverse suspension polymerization and is thus a product by process claim. Where product by process claims are rejected over a prior art product that appears to be the same, the burden is shifted to applicants to establish an unobvious difference, even if the production processes are different. In re Marosi, 218 USPQ 289 (Fed. Cir. 1983). Furthermore, the patentability of a product claim rests on the product formed and not on the method by which it is produced. In re Thorpe, 227, USPQ 984 (Fed. Cir. 1985).

Further, the molar composition as recited in claim 19 is met. Thus, the product must inherently have the ratio as claimed in claims 23 and 24, absent evidence to the contrary.

Additionally, given that the disclosed molecular wt. in the prior art is broad, ranging from 100,000 to 30,000,000, the viscosity of the polymer solution must inherently be within the claimed range of instant claim 25.

With regard to claim 21, Table 11 discloses a rinse off or leave-on condition compositions comprising acrylamide/DADMAC copolymer (V and W) in a conditioning composition.

Furthermore, given that the dispersion polymers are useful in compositions for hair and in combination with other polymers, provide control and hair management (col. 17, lines 42-60), a reasonable basis exists to believe that the disclosed compositions must inherently have presently claimed detangling effect of instant claims 27 and 28.

6. Claims 9-15, 17-25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over as being unpatentable over Brandt et al. (US 6,696,067 B2) in view of Flesher et al. (US 4,506,062) and Baker et al. (US 4,786,681).

The discussion with regard to Brandt et al. in paragraph 5 above is incorporated herein by reference.

The difference between the prior art and the instant invention is that the prior art does not teach an inverse suspension process for polymerizing the comonomers.

The prior art to Flesher et al. concerns a process of polymerizing ionic material by inverse suspension polymerization process in the presence of a stabilizer (abstract). The invention is of particular value in the production of high molecular wt., water-soluble homopolymers of quaternary ammonium derivatives of inorganic acid salts of dialkylaminoalkyl-acrylamides, dialkylaminoalkyl-(meth)acrylates and their copolymers with acrylamide etc. (col. 2, lines 30-37). Thus, it would have been obvious to one of ordinary skill in

the art to utilize the polymerization method of Flecher et al. to prepare copolymers of Brandt et al. because Flesher et al. teach that the process affords high molecular wt. polymers.

Further, prior art to Baker et al. discloses inverse polymerization process for production of water soluble of polymers of acrylamide or acrylic acid homopolymer or copolymers thereof (col. 1, lines 53-65). In col. 4, lines 2-19, Baker et al. disclose the various comonomers that may be copolymerized with acrylamide which includes both, diethylamino(meth)acrylate and DADMAC. Given the equivalent and interchangeable nature of diethylamino(meth)acrylate and DADMAC, it would have been within the capabilities of a skilled artisan to utilize DADMAC in lieu of diethylamino(meth)acrylate in the polymerization method of Flesher et al. and thereby arrive at the presently cited claims. The Baker reference is used as a teaching reference, i.e. within the same filed of endeavor, diethylamino(meth)acrylate and DADMAC are considered equivalent and interchangeable and one skilled in the art would have found it obvious to replace one with the other.

It is the examiner's position that the process of Flesher et al. must intrinsically result in polymer beads as recited in instant claims 12 and 22.

7. Claims 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over as being unpatentable over Brandt et al. (US 6,696,067 B2) in view of Flesher et al. (US 4,506,062), Baker et al. (US 4,786,681) and Das (US 4,304,703).

The discussions with regard to Brandt et al., Flesher et al., Baker et al. in paragraphs 5 and 6 above are incorporated herein by reference.

The prior art is silent with regard to polymerization in the presence of transfer agents

The prior art to Das discloses polymerization of free radical polymerization of ethylenically unsaturated monomers in the presence of a chain transfer agent. Disclosed chain transfer agents include alkyl mercaptans, for example, tertiary-dodecyl mercaptan; ketones such as methyl ethyl ketone, chlorohydrocarbons such as chloroform etc. (col. 5, line 27-36). It would have been obvious to a skilled artisan to include chain transfer agents as taught by Das during polymerization of monomeric compositions of Brandt et al. because the prior art to Das teaches that such chain transfer provides control over the molecular weight to give products having the required viscosity for various coating applications.

### *Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112. The examiner can be reached on Mon-Wed, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Satya B Sastri/*

*Examiner, Art Unit 1796*